

WEST Search History for Application 10551736

Creation Date: 2011072509:41

374/\$.ccls.PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-03-2008
(11453117) and (tube near junction or junction)PGPB ADJ YES 11-03-2008
(374/100, 110, 111, 112, 113, 114, 115;135, 136, 137, 163, 183, 185, 179,
208;73/865.5;136/200)![CCLS]PGPB, USPT, USOC, EPAB, JPAB ADJ 11-03-2008
((374/100, 110, 111, 112, 113, 114, 115;135, 136, 137, 163, 183, 185, 179,
208;73/865.5;136/200)![CCLS]) and (thermocouple near rake)PGPB, USPT, USOC, EPAB,
JPAB ADJ YES 11-03-2008
((374/100, 110, 111, 112, 113, 114, 115;135, 136, 137, 163, 183, 185, 179,
208;73/865.5;136/200)![CCLS]) and (rake)PGPB, USPT, USOC, EPAB,
JPAB ADJ YES 11-03-2008
((374/100, 110, 111, 112, 113, 114, 115;135, 136, 137, 163, 183, 185, 179,
208;73/865.5;136/200)![CCLS]) and (vessel near temperature)PGPB, USPT, USOC, EPAB,
JPAB ADJ YES 11-03-2008
((374/100, 110, 111, 112, 113, 114, 115;135, 136, 137, 163, 183, 185, 179,
208;73/865.5;136/200)![CCLS]) and (lever near15 temperature)PGPB, USPT, USOC, EPAB,
JPAB ADJ YES 11-03-2008
(level) near15 (liquid or fluid or vessel or container)PGPB, USPT, USOC, EPAB,
JPAB ADJ YES 11-03-2008
((level) near15 (liquid or fluid or vessel or container)) and ((374/100, 110, 111, 112, 113, 114,
115;135, 136, 137, 163, 183, 185, 179, 208;73/865.5;136/200)![CCLS])PGPB, USPT, USOC,
EPAB, JPAB ADJ YES 11-03-2008
374/136PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-03-2008
374/137PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-03-2008
(374/137) and (temperature sensor or thermal probe or thermal sensor or temperature probe
or thermal detector or temperature detector)PGPB, USPT, USOC, EPAB, JPAB, DWPI,
TDBD ADJ YES 11-03-2008
(7004625.pn.) and (pooley or spool or reel)USPT ADJ YES 11-03-2008
374/4.ccls.USPT ADJ YES 11-03-2008
374/\$.ccls.USPT ADJ YES 11-03-2008
(374/\$.ccls.) and (tube near connect\$3 or cylindrical near
connect\$3)USPT ADJ YES 11-03-2008
(374/\$.ccls. and (tube near connect\$3 or cylindrical near connect\$3)) and ((374/100, 110, 111,
112, 113, 114, 115;135, 136, 137, 163, 183, 185, 179, 208;73/865.5;136/200)![CCLS])PGPB,
USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-03-2008
(374/137, 136, 110, 111, 112, 113)![CCLS]PGPB, USPT, USOC, EPAB, JPAB ADJ 11-03-2008
((374/137, 136, 110, 111, 112, 113)![CCLS]) and (cylindrical near conduit)PGPB, USPT, USOC,
EPAB, JPAB ADJ YES 11-03-2008
((374/137, 136, 110, 111, 112, 113)![CCLS]) and (374/\$.ccls. and (tube near connect\$3 or
cylindrical near connect\$3))PGPB, USPT, USOC, EPAB, JPAB ADJ YES 11-03-2008
374/137USPT ADJ YES 11-03-2008
(374/137) and (thermo near well or cable)USPT ADJ YES 11-03-2008
374/136USPT ADJ YES 11-03-2008
(374/137, 139, 140, 141, 142, 26, 170;266/274;222, 590, 594)![CCLS]PGPB, USPT, USOC,
EPAB, JPAB ADJ 11-06-2008
((374/137, 139, 140, 141, 142, 26, 170;266/274;222, 590, 594)![CCLS]) and (molten or melt or
molten bath or molten metal or molten steel or molten iron or molten aluminum)PGPB,

USPT, USOC, EPAB, JPAB ADJ YES 11-06-2008
 ((374/137, 139, 140, 141, 142, 26, 170;266/274;222, 590, 594)! [CCLS]) and (molten or molten bath or molten metal or molten steel or molten iron or molten aluminum)PGPB, USPT, USOC, EPAB, JPAB ADJ YES 11-06-2008
 ((374/137, 139, 140, 141, 142, 26, 170;266/274;222, 590, 594)! [CCLS]) and (container)PGPB ADJ YES 11-06-2008
 ((374/137, 139, 140, 141, 142, 26, 170;266/274;222, 590, 594)! [CCLS] and (molten or molten bath or molten metal or molten steel or molten iron or molten aluminum)) and (level)PGPB, USPT, USOC, EPAB, JPAB ADJ YES 11-06-2008
 374/\$.ccls.PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 (374/\$.ccls.) and (molten same level)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 (374/\$.ccls. and (molten same level)) and (thermocouple\$1)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 (374/\$.ccls.) and (load\$3 near molten)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 (load\$3 near molten)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 ((load\$3 near molten)) and (thermocouple or molten near level)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 (averag\$3 near temperature or threshold near temperature or predetermin\$3 near temperature)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 ((averag\$3 near temperature or threshold near temperature or predetermin\$3 near temperature)) and ((load\$3 near molten) and (thermocouple or molten near level))PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 (averag\$3 near temperature or threshold near temperature or predetermin\$3 near temperature) same (molten metal)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 374/\$.ccls.PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 (374/\$.ccls.) and ((averag\$3 near temperature or threshold near temperature or predetermin\$3 near temperature) same (molten metal))PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-07-2008
 4984904.pn.USPT ADJ YES 11-13-2008
 (4984904.pn.) and (process\$3)USPT ADJ YES 11-13-2008
 (4984904.pn.) and (control\$4)USPT ADJ YES 11-13-2008
 374/\$.ccls.PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-13-2008
 (374/\$.ccls.) and (comar\$3 near15 threshold)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-13-2008
 (374/\$.ccls.) and (compar\$3 near15 threshold)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-13-2008
 (374/\$.ccls.) and (compar\$3 near threshold)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-13-2008
 (374/\$.ccls. and (compar\$3 near threshold)) and (alarm\$3 or warning or shut\$3 or turn\$3)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-13-2008
 (374/\$.ccls. and (compar\$3 near threshold)) and (alarm\$3 or warning or shut\$3 or turn\$3) and (average near temperature)PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD ADJ YES 11-13-2008
 4362403.pn.USPT ADJ YES 11-13-2008
 (4362403.pn.) and (averag\$3)USPT ADJ YES 11-13-2008
 4672842.pn. and (averag\$3)USPT ADJ YES 11-13-2008
 4915507.pn. and (averag\$3)USPT ADJ YES 11-13-2008
 2071531.pn.USPT ADJ YES 11-13-2008

63312810USOC, EPAB, JPAB, DWPI ADJ YES 11-13-2008
62261928USOC, EPAB, JPAB, DWPI ADJ YES 11-13-2008
62261928EPAB, JPAB ADJ YES 12-02-2008

Prior Art Searches

Query	DB	Op.	Plur.	Thes.	Date
(374/100, 163, 185, 183, 179, 208, 141, 143, 144, des10/57;116/200;600/474, 549;136/200;73/866.5)! [CCLS]	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		09-03-2009
((374/100, 163, 185, 183, 179, 208, 141, 143, 144, des10/57;116/200;600/474, 549;136/200;73/866.5)! [CCLS]) and ((thread\$4) near (sens\$3 or detect\$3 or probe or thermocouple or gauge or transducer))	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		09-03-2009
10551736	PGPB	ADJ	YES		09-04-2009
(10551736) and (thermocouple)	PGPB	ADJ	YES		09-04-2009
(10551736) and (thermocouple) and (resist\$3 or thermistor)	PGPB	ADJ	YES		09-04-2009
374/\$.ccls.	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		09-04-2009
(374/\$.ccls.) and (liquid near level or fluid near level or molt\$2 near level or hydrocarbon near level or melt near level)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		09-04-2009
(374/\$.ccls. and (liquid near level or fluid near level or molt\$2 near level or hydrocarbon near level or melt near level)) and (temperature)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		09-04-2009
(374/\$.ccls. and (liquid near level or fluid near level or	PGPB,	ADJ	YES		09-04-2009

molt\$2 near level or hydrocarbon near level or melt near level) and (temperature)) and (level near sens\$3 or level near detect\$3 or level near probe or level near gauge or level near transducer)	USPT, USOC, EPAB, JPAB, DWPI, TDBD				
(374/\$.ccls. and (liquid near level or fluid near level or molt\$2 near level or hydrocarbon near level or melt near level) and (temperature) and (level near sens\$3 or level near detect\$3 or level near probe or level near gauge or level near transducer)) and (shut off or switch off)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		09-04-2009
4915145.pn.	USPT	ADJ	YES		09-04-2009
4919543.pn.	USPT	ADJ	YES		09-04-2009
11571114	PGPB	ADJ	YES		10-15-2010
(11571114) and (gas)	PGPB	ADJ	YES		10-15-2010
(11571114) and (gas) and (phase)	PGPB	ADJ	YES		10-15-2010
(11571114 and (gas)) and (liquid and solid)	PGPB	ADJ	YES		10-15-2010
(11571114) and (liquid)	PGPB	ADJ	YES		10-15-2010
(11571114 and (liquid)) and (solid)	PGPB	ADJ	YES		10-15-2010
gas phase detect\$3	USPT	ADJ	YES		10-18-2010
(hot or warm or boil\$3)	USPT	ADJ	YES		10-18-2010
((hot or warm or boil\$3)) and (gas phase detect\$3)	USPT	ADJ	YES		10-18-2010
11571114	PGPB	ADJ	YES		10-18-2010
(11571114) and (water)	PGPB	ADJ	YES		10-18-2010
(11571114) and (nitrogen)	PGPB	ADJ	YES		10-18-2010
(11571114) and (warm or hot)	PGPB	ADJ	YES		10-18-2010
2558063.pn.	USPT	ADJ	YES		10-18-2010
2820196.pn.	USPT	ADJ	YES		10-18-2010
3214963.pn.	USPT	ADJ	YES		10-18-2010
3273379.pn.	USPT	ADJ	YES		10-18-2010
3316752.pn.	USPT	ADJ	YES		10-18-2010
3516752.pn.	USPT	ADJ	YES		10-18-2010

3588689.pn.	USPT	ADJ	YES		10-18-2010
3914688.pn.	USPT	ADJ	YES		10-18-2010
4627740.pn.	USPT	ADJ	YES		10-18-2010
(thermocouple\$1 or thermopile) same (hot and cold) and (fluid or liquid or gas or medium or media or substance) and (thermal conducti\$4 or heat conducti\$4 or thermal resist\$4 or heat resist\$)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		10-18-2010
374/\$.ccls.	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		10-18-2010
(374/\$.ccls.) and ((thermocouple\$1 or thermopile) same (hot and cold) and (fluid or liquid or gas or medium or media or substance) and (thermal conducti\$4 or heat conducti\$4 or thermal resist\$4 or heat resist\$))	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		10-18-2010
(cold junction and hot junction) near (temperature)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		10-18-2010
(cold junction and hot junction) near (equal temperature)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		10-18-2010
(cold junction and hot junction) near (same temperature)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		10-18-2010

(cold junction and hot junction) near (sam\$1 temperature)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
(cold junction and hot junction) near (sam\$1 environment)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
(cold junction and hot junction) same (sam\$1 temperature or sam\$1 environment or sam\$1 fluid or sam\$1 liquid)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
2702476.pn.	USPT	ADJ	YES		10-18-2010
2745283.pn.	USPT	ADJ	YES		10-18-2010
7258483.pn.	USPT	ADJ	YES		10-18-2010
11676360	PGPB	ADJ	YES		10-18-2010
(11676360) and (heat\$3)	PGPB	ADJ	YES		10-18-2010
(liquid level or oil level or fluid level) same (thermocouple or thermoelement or thermopile)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
((liquid level or oil level or fluid level) same (thermocouple or thermoelement or thermopile)) and (374/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
((liquid level or oil level or fluid level) same (thermocouple or thermoelement or thermopile) and 374/\$.ccls.) and (heat\$4)	PGPB, USPT, USOC, EPAB,	ADJ	YES		10-18-2010

	JPAB, DWPI, TDBD				
(374/100, 4, 5, 57, 110, 112, 115, 137, 29, 43, 44, 166, 167, 179, 141, 147, 148;136/200;116/216)! [CCLS]	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		10-18-2010
(374/100, 4, 5, 57, 110, 112, 115, 137, 29, 43, 44, 166, 167, 179, 141, 147, 148;136/200;116/216;73/290R, 1.16, 1.31, 1.73, 861, 204.11, 204.23, 292, 295)! [CCLS]	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		10-18-2010
((374/100, 4, 5, 57, 110, 112, 115, 137, 29, 43, 44, 166, 167, 179, 141, 147, 148;136/200;116/216;73/290R, 1.16, 1.31, 1.73, 861, 204.11, 204.23, 292, 295)! [CCLS]) and (thermocouple\$1 or thermopile)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		10-18-2010
((374/100, 4, 5, 57, 110, 112, 115, 137, 29, 43, 44, 166, 167, 179, 141, 147, 148;136/200;116/216;73/290R, 1.16, 1.31, 1.73, 861, 204.11, 204.23, 292, 295)! [CCLS] and (thermocouple\$1 or thermopile)) and (peltier)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		10-18-2010
374/54	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
(374/54) and (thermocouple\$1 or thermopile)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
(374/54 and (thermocouple\$1 or thermopile)) and (heat\$4)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-18-2010
(thermocouple\$1 or thermopile)		ADJ	YES		10-18-2010

	EPAB, JPAB, DWPI				
(length or depth or level or volume) same (fluid or liquid or oil or substance)	EPAB, JPAB, DWPI	ADJ	YES		10-18-2010
((length or depth or level or volume) same (fluid or liquid or oil or substance)) and ((thermocouple\$1 or thermopile))	EPAB, JPAB, DWPI	ADJ	YES		10-18-2010
374/54	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(level) near (fluid or liquid or substance or oil)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((level) near (fluid or liquid or substance or oil)) and (374/54)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((level) near (fluid or liquid or substance or oil)) and (374/54) and (cold junction\$1)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((level) near (fluid or liquid or substance or oil)) and (cold junction\$1)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
11676360	PGPB	ADJ	YES		10-19-2010

(11676360) and (heat\$4)	PGPB	ADJ	YES		10-19-2010
(level) near (detect\$3 or sens\$3 or gauge)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((level) near (detect\$3 or sens\$3 or gauge)) and ((plurality) near (thermocoulumn or thermopiles))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(level) near (detect\$3 or sens\$3 or gauge) near (thermopile)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(level) near (detect\$3 or sens\$3 or gauge) near (thermocouple or thermoelement)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
4672842.pn.	USPT	ADJ	YES		10-19-2010
2468676.pn.	USPT	ADJ	YES		10-19-2010
6098457.pn.	USPT	ADJ	YES		10-19-2010
(level) near (detect\$3 or sens\$3 or gauge or indicat\$3) same (thermocouple or thermoelement or thermopile) same (fluid or liquid or substance)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((level) near (detect\$3 or sens\$3 or gauge or indicat\$3) same (thermocouple or thermoelement or thermopile) same (fluid or liquid or substance)) and (opening or hole or fenestr\$4 or oreifice or aperture or penetrat\$4)	PGPB, USPT, USOC, EPAB, JPAB,	ADJ	YES		10-19-2010

	DWPI, TDBD				
((level) near (detect\$3 or sens\$3 or gauge or indicat\$3) same (thermocouple or thermoelement or thermopile) same (fluid or liquid or substance)) and (opening or hole or fenestr\$4 or orifice or aperture or penetrat\$4)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
73/\$.ccls.	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
374/\$.ccls.	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(374/\$.ccls.) and ((level) near (detect\$3 or sens\$3 or gauge or indicat\$3) same (thermocouple or thermoelement or thermopile) same (fluid or liquid or substance) and (opening or hole or fenestr\$4 or orifice or aperture or penetrat\$4))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile) same (fluid or liquid or substance) and (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile) same (fluid or liquid or substance) and (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)) and (374/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile) near\$5 (fluid or liquid or	PGPB, USPT,	ADJ	YES		10-19-2010

substance) same (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)	USOC, EPAB, JPAB, DWPI, TDBD				
((detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile) near5 (fluid or liquid or substance) same (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)) and (374/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile) near5 (fluid or liquid or substance) near5 (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile) near5 (fluid or liquid or substance) near5 (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)) and (374/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile or probe) near5 (fluid or liquid or substance or oil or gas or flow) near5 (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((detect\$3 or sens\$3 or gauge or indicat\$3 or thermocouple or thermopile or probe) near5 (fluid or liquid or substance or oil or gas or flow) near5 (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5)) and (374/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(thermocouple or thermopile or junctions) near5 (fluid or liquid or substance or oil or gas or flow) near5 (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5 or perforat\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI,	ADJ	YES		10-19-2010

	TDBD				
((thermocouple or thermopile or junctions) near5 (fluid or liquid or substance or oil or gas or flow) near5 (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5 or perforat\$3)) and (374/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
((thermocouple or thermopile or junctions) near5 (fluid or liquid or substance or oil or gas or flow) near5 (fenestra\$4 or aperture or hole or penetration or protrusion or orifice or fenestr\$5 or perforat\$3)) and (73/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
3015234.pn.	USPT	ADJ	YES		10-19-2010
6431750.pn.	USPT	ADJ	YES		10-19-2010
6123675.pn.	USPT	ADJ	YES		10-19-2010
4747700.pn.	USPT	ADJ	YES		10-19-2010
expos\$4 near junctions	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
(thermocouple or thermopile or junctions) near (expos\$4) near (fluid or liquid or substance or oil or gas or flow)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-19-2010
3301055.pn.	USPT	ADJ	YES		10-21-2010
(3301055.pn.)	USPT	ADJ	YES		10-21-2010
3360990.pn.	USPT	ADJ	YES		10-21-2010
3360990.pn. and (current)	USPT	ADJ	YES		10-21-2010
6123675.pn.	USPT	ADJ	YES		10-21-2010
(6123675.pn.) and (foil or thin)	USPT	ADJ	YES		10-21-2010
(3301055.pn.) and (film)	USPT	ADJ	YES		10-21-2010

4387438.pn.	USPT	ADJ	YES		10-21-2010
(4387438.pn.) and (impulse)	USPT	ADJ	YES		10-21-2010
(4387438.pn.) and (process\$3 or controll\$3)	USPT	ADJ	YES		10-21-2010
(4387438.pn.) and (process\$3 or controll\$3) and (level)	USPT	ADJ	YES		10-21-2010
(6123675.pn.) and (process\$3 or controll\$3) and (level)	USPT	ADJ	YES		10-21-2010
(6123675.pn.) and (process\$3 or controll\$3) and (level) and (integrat\$3)	USPT	ADJ	YES		10-21-2010
6862932.pn.	USPT	ADJ	YES		10-21-2010
(6862932.pn.) and (controll\$3 or process43)	USPT	ADJ	YES		10-21-2010
374/54	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(374/54) and (impulse)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(374/54) and (microprocessor)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(374/54) and (microprocessor) and (integrat\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(374/54) and (microprocessor) and (integrat\$3) and (impulse)	PGPB, USPT, USOC, EPAB, JPAB,	ADJ	YES		10-21-2010

	DWPI, TDBD				
(impulse near generat\$3) same (level near sens\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(impulse near generat\$3) same (level)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
374/\$.ccls.	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(374/\$.ccls.) and ((impulse near generat\$3) same (level))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
2702476.pn.	USPT	ADJ	YES		10-21-2010
(pulse generat\$3 and integrator) same (level sens\$3 or level gauge or level probe or level transducer)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
plated through holes same thermocouple	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010

20090225517	PGPB	ADJ	YES		10-21-2010
(20090225517) and (RF)	PGPB	ADJ	YES		10-21-2010
7057527.pn.	USPT	ADJ	YES		10-21-2010
5400610.pn.	USPT	ADJ	YES		10-21-2010
20050069861	PGPB	ADJ	YES		10-21-2010
20080031483	PGPB	ADJ	YES		10-21-2010
5108192.pn.	USPT	ADJ	YES		10-21-2010
(5108192.pn.) and (fluid or liquid or substance)	USPT	ADJ	YES		10-21-2010
3716417.pn.	USPT	ADJ	YES		10-21-2010
(3716417.pn.) and 38	USPT	ADJ	YES		10-21-2010
(3716417.pn.) and (fluid or liquid or substance)	USPT	ADJ	YES		10-21-2010
5178009.pn.	USPT	ADJ	YES		10-21-2010
(5178009.pn.) and (transistor or diode)	USPT	ADJ	YES		10-21-2010
(molten metal) same (transitor)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(molten metal) near (temperature) same (transistor or diode)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(level) near (sensor or gauge or transducer or detect\$3 or meter\$3) same (transistor or diode)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
374/54	PGPB, USPT, USOC, EPAB, JPAB,	ADJ	YES		10-21-2010

	DWPI, TDBD				
(374/54) and ((level) near (sensor or gauge or transducer or detect\$3 or meter\$3) same (transistor or diode))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
((level) near (sensor or gauge or transducer or detect\$3 or meter\$3) same (transistor or diode)) and (temperature near transistor)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
(temperature near transistor)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
((temperature near transistor)) and (374/54)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		10-21-2010
374/\$.ccls.	USPT	ADJ	YES		10-21-2010
(374/\$.ccls.) and ((temperature near transistor))	USPT	ADJ	YES		10-21-2010
(temperature near transistor) same (liquid or fluid or gas or molten metal)	USPT	ADJ	YES		10-21-2010
10551736	PGPB	ADJ	YES		07-21-2011
(10551736) and (elongated probe)	PGPB	ADJ	YES		07-21-2011
(10551736) and (probe and mov\$4)	PGPB	ADJ	YES		07-21-2011
4672842.pn.	USPT	ADJ	YES		07-21-2011
(10551736) and (manual\$3)	PGPB	ADJ	YES		07-21-2011
(reposition\$4 probe) and (molten metal)	PGPB, USPT, USOC,	ADJ	YES		07-21-2011

	EPAB, JPAB, DWPL, TDBD				
(\$3position\$4 probe or relocat\$4 probe or move\$4 probe or moveable probe or moving probe) and (molten metal)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		07-21-2011
(immersion) near (probe or thermocouple)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		07-25-2011
((immersion) near (probe or thermocouple)) and (melt or molten metal or molt or slag)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		07-25-2011
((immersion) near (probe or thermocouple) and (melt or molten metal or molt or slag)) and (temperature)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		07-25-2011
((immersion) near (probe or thermocouple) and (melt or molten metal or molt or slag) and (temperature)) and (\$5controller or controlling or processing or \$5processor or computer)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		07-25-2011
((immersion) near (probe or thermocouple) and (melt or molten metal or molt or slag) and (temperature) and (\$5controller or controlling or processing or \$5processor or computer)) and (valve)	PGPB, USPT, USOC, EPAB, JPAB, DWPL, TDBD	ADJ	YES		07-25-2011

((immersion) near (probe or thermocouple) and (melt or molten metal or molt or slag) and (temperature) and (\$5controller or controlling or processing or \$5processor or computer) and (valve)) and (shut-off or turn\$3 adj off or shut\$4 adj off or turn-off)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		07-25-2011
(374/100, 141, 29, 30, 166, 140, 139, 147, 111, 112, 113, 114, 115, 135, 136, 137, 163, 183, 185, 179, 208, 54;73/865.5;136/200;324/FOR104:266/87, 90, 99, 107, 111, 274;204/421;604/208)! [CCLS]	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS]	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS]	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS]) and (melt or molten metal or molt or slag or molten)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS] and (melt or molten metal or molt or slag or molten)) and (\$5controller or controlling or processing or \$5processor or computer)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS] and (melt or molten metal or molt or slag or molten) and (\$5controller or controlling or processing or \$5processor or computer)) and (feedback valve)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R,	PGPB, USPT, USOC,	ADJ	YES		07-25-2011

290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS] and (melt or molten metal or molt or slag or molten) and (\$5controller or controlling or processing or \$5processor or computer)) and (volume or level) and (feedback)	EPAB, JPAB				
((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS] and (melt or molten metal or molt or slag or molten) and (\$5controller or controlling or processing or \$5processor or computer) and (volume or level) and (feedback)) and (temperature)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(\$5controller or controlling or processing or \$5processor or computer) same (feedback)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(((\$5controller or controlling or processing or \$5processor or computer) same (feedback)) and ((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS] and (melt or molten metal or molt or slag or molten))	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(((\$5controller or controlling or processing or \$5processor or computer) same (feedback) and (374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS] and (melt or molten metal or molt or slag or molten)) and (temperature)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(((\$5controller or controlling or processing or \$5processor or computer) same (feedback) and (374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS] and (melt or molten metal or molt or slag or molten) and (temperature)) and (level or volume)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(melt or molten metal or molt or slag or molten) same (level or volume)	PGPB, USPT,	ADJ	YES		07-25-2011

	USOC, EPAB, JPAB				
((melt or molten metal or molt or slag or molten) same (level or volume)) and ((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS])	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(\$5controller or controlling or processing or \$5processor or computer) same (feedback) and ((melt or molten metal or molt or slag or molten) same (level or volume) and (374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS])	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(melt or molten metal or molt or slag or molten or cast\$3) same (level or volume or length or heights)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(\$5controller or controlling or processing or \$5processor or computer) same (feedback) and ((melt or molten metal or molt or slag or molten or cast\$3) same (level or volume or length or heights)) and ((374/139, 140, 141, 147, 163, 166, 135, 136, 137, 208, 183, 185, 179, 54, 29, 30, 6, 45;204/421;136/200;604/208;73/865.5, 866.5, 861, 290R, 290, 295, 301, 304R, 319;324/FOR104, 754, 760;266/87, 90, 99, 107, 111, 274)! [CCLS])	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(volume or level) near (feedback control)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
374/\$.ccls.	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(374/\$.ccls.) and ((volume or level) near (feedback control))	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011

(volume or level) near (control\$3)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
((volume or level) near (control\$3)) and (374/\$.ccls.)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
((volume or level) near (control\$3) and 374/\$.ccls.) and (valve)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
(valve) near (shut-off or turn\$3 adj off or shut\$4 adj off or turn-off or open\$3 or clos\$3 or shut\$4 or turn\$4)	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
((valve) near (shut-off or turn\$3 adj off or shut\$4 adj off or turn-off or open\$3 or clos\$3 or shut\$4 or turn\$4)) and ((volume or level) near (control\$3) and 374/\$.ccls. and (valve))	PGPB, USPT, USOC, EPAB, JPAB	ADJ	YES		07-25-2011
10551736.pn.	PGPB	ADJ	YES		07-25-2011
(10551736.pn.) and (level or volume)	PGPB	ADJ	YES		07-25-2011
20070251960	PGPB	ADJ	YES		07-25-2011
(20070251960) and (level or volume)	PGPB	ADJ	YES		07-25-2011
(20070251960) and (level or volume) and (indicat\$3)	PGPB	ADJ	YES		07-25-2011
(20070251960) and (physical propert\$3)	PGPB	ADJ	YES		07-25-2011